



## Rain Barrels

Rain barrels collect and store rainwater from rooftops to use for watering your lawn and garden, washing your car, or to top off a swimming pool.

- Lawn and garden watering make up nearly 40% of the total household water use during the summer months.
- Using rain barrels helps reduce the storm water runoff.
- Rain water does not contain the additives that tap water does and is better for lawns and gardens.
- In Knox County, a 2,000 square foot roof can collect over 50,000 gallons of water a year.
- Rain barrels can be purchased at your local hardware store or they can easily be built.

### How much water can you collect from your roof?

Calculate your roof area by measuring the outside walls and the overhang.

For example: if you have 36ft by 46ft (length x width) walls with a 2ft overhang on each side add 4 feet to the length and the width for the four sides of the house.

$$(36+4) \times (46+4) = 2,000 \text{ square feet}$$

2,000 square feet collects 1,200 gallons of water for every 1 inch of rain.

In Knox County, IN the average precipitation is 42.6 inches per year.

$$42.6 \text{ inches} \times 1,200 \text{ gallons} = 51,120 \text{ gallons of rainwater a year}$$



Photo courtesy of Allen and Judy Uhte.



## Build a Rain Barrel

Materials: 55 gallon plastic drum  
2 plastic spigots  
Hardware cloth or a skimmer basket  
Elbow and extension for downspout  
Waterproof sealant  
Concrete blocks

- Drill two holes in the barrel. One at the bottom for the spigot to connect to the garden hose and one at the top for a spigot for overflow or to connect to another barrel. (If you are connecting barrels the one on the end must have an overflow drain). Line the holes with waterproof sealant before threading the spigots through the holes so water will not leak.
- Cut a hole in the top of the barrel for the down spout and place a piece of hardware cloth or a skimmer basket in the top of the barrel to collect leaves and twigs. Make sure that no mosquitoes can get into the barrel.
- Place the barrel on one or two concrete blocks and cut the downspout at the right height. Then add elbows and extensions to your downspouts.

